

DETAILED ACTION

This action is in response to the request for continued examination filed 15 June 2011. Claims 23, 24, 26, 35, 36, 38, 47, 48, 50, 59-61 have been amended. Claims 1-22, 25, 37, 49, 53, 64, 65 have been canceled. Claims 70-85 are new. Claims 23, 24, 26-36, 38-48, 50-52, 54-63, 66-85 are pending and have been considered below.

Response to Arguments

1. Applicant's arguments filed 15 June 2011 have been fully considered but they are not persuasive.

The applicant argues that the amendment to the independent claims 23, 35, 47 and 59, "controlling the display device to, while the at least one dragged object is being dragged over a destination object switch the display of the second image of the cursor to a display of a third image of the cursor in the user interface, the third image of the cursor comprising a second hybrid cursor having a pointer arrow with a second variable graphic replacing the first variable graphic comprised in the second image, the second variable graphic including a graphical representation indicating whether an operation associated with the dragging of the at least one dragged object can be successfully performed based on the characteristic of the at least one dragged object," is not disclosed in Malamud. The examiner respectfully disagrees. Malamud discloses (paragraph 0011 [The format may be: (i) the name of the object over which the cursor is positioned on the video display; (ii)

information about the object; (iii) a graphical representation of the object, known as a preview; or (iv) any combination of the previously mentioned formats.], paragraph 0088 [Returning to FIG. 4B, if there are not multiple objects selected (no response in step 76), a test is made to determine if the user is in the process of performing a drag and drop operation (step 82). ... If the target is not valid, processing for an invalid target object is performed (step 92). It will be appreciated that there are a myriad of ways to process an invalid target object. In one actual embodiment of the present invention, no information is displayed in the information box but the cursor changes, for example, to a circle with a slash through the circle. In another embodiment, an error message is displayed in the information box.]). As can be seen, Malamud discloses that the information box can be graphical, information about the object, or any combination of the previously mentioned formats. Furthermore, Malamud further discloses that a test is done to determine if one or multiple objects are selected and then tests to see if the user is in the process of a drag and drop operation to a target. If the target is not valid, then either cursor can be changed to a symbol indicating that the operation cannot be performed or an error message is displayed in the information box. In any case, the indication of whether the operation can or cannot be performed can be graphical, information about the object or a combination of both graphical and information.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 23, 26-35, 38-47, 50-52, 54-59, 61-63, 66-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malamud et al. (US 20030142123 A1) in view of Muller (US 4,984,152).

Claims 1-22. (Canceled)

Claim 23. Malamud discloses a non-transitory computer-readable recording medium having a computer program recorded thereon that causes a computer to control a display device to display a user interface and at least two different images of a cursor within the displayed user interface, the computer program causing the computer to perform operations comprising:

- a. displaying, in the user interface on the display device, a first image of the cursor, the first image of the cursor comprising a pointer arrow having a tail (paragraph 0052, figure 2E, [no information box is shown. cursor 35c is only an arrow with a tail.]);

- b. receiving a control input containing an instruction to drag at least one object displayed in the user interface on the display device (paragraphs 0042, 0047, figure 2C, [only the appearance of the pointer changes, not its functionality. A user can still select, click and drag]);
- c. controlling the display device to, upon receipt of the control input, switch the display of the first image of the cursor to a display of a second image of the cursor in the user interface, the second image of the cursor comprising a first hybrid cursor having a pointer arrow with a first variable graphic placed proximate to the tail (paragraphs 0042, 0047, figure 2c, [only the appearance of the pointer changes, not its functionality. A user can still select, click and drag. two names may be displayed in the name information pointer 26 during a drag and drop operation.]7); and
- d. controlling the display device to display the first variable graphic in the user interface as an alphanumeric representation process including a numerical value representing a characteristic of the at least one object (paragraph 0058, figure 2K2, paragraph 0059, figure 2L2, [the information box 41E in FIG. 2K2 includes the type of data in the document, the size of the document and the source of the document. The information shown in the information box 41 G in FIG. 2L2 includes the type of object (i.e., folder), the contents of the folder and the space occupied by the contents of the folder.]).
- e. controlling the display device to, while the at least one dragged object is being dragged over a destination object switch the display of the second image of the

cursor to a display of a third image of the cursor in the user interface, the third image of the cursor comprising a second hybrid cursor having a pointer arrow with a second variable graphic replacing the first variable graphic comprised in the second image, the second variable graphic including a graphical representation indicating whether an operation associated with the dragging of the at least one dragged object can be successfully performed based on the characteristic of the at least one dragged object (paragraph 0011 [The format may be: (i) the name of the object over which the cursor is positioned on the video display; (ii) information about the object; (iii) a graphical representation of the object, known as a preview; or (iv) any combination of the previously mentioned formats.], paragraph 0088 [Returning to FIG. 4B, if there are not multiple objects selected (no response in step 76), a test is made to determine if the user is in the process of performing a drag and drop operation (step 82). ... If the target is not valid, processing for an invalid target object is performed (step 92). It will be appreciated that there are a myriad of ways to process an invalid target object. In one actual embodiment of the present invention, no information is displayed in the information box but the cursor changes, for example, to a circle with a slash through the circle.

In another embodiment, an error message is displayed in the information box.)).

Malamud does not disclose a first variable graphic replacing the tail comprised in the first image, as disclosed in the claims. However, in the same field of invention, Muller discloses replacing the default cursor with by other shapes or icons representative of the current computer functionality (column 1, lines 64-68), wherein the tail of the cursor has been replaced with an image portion representing a functionality being executed by the computer (column 7, lines 28-35, figure 10). Therefore, considering the teachings of Malamud and Muller, it would have been obvious to one having ordinary skill in the art at the time of the invention to add a first variable graphic replacing the tail comprised in the first image to the teachings of to the teachings of Malamud. One would have been motivated to add a first variable graphic replacing the tail comprised in the first image to the teachings of to the teachings of Malamud in order to reduce ambiguity as to the parameters and operation that is currently being executed (Muller: column 2, lines 1-18).

Malamud and Muller do not disclose while the at least one object is being dragged, the first variable graphic in the user interface as an alphanumeric representation process including a numerical value representing a characteristic of the at least one dragged object, as disclosed in the claims. However, Malamud discloses displaying information about the source during a drag operation (paragraph 0047, figure 2C) and displaying

information indicating size and number associated with the source object (paragraph 0058, figure 2K2, paragraph 0059, figure 2L2). Therefore, considering the teachings of Malamud and Muller, it would have been obvious to one having ordinary skill in the art at the time of the invention to add while the at least one object is being dragged, the first variable graphic in the user interface as an alphanumeric representation process including a numerical value representing a characteristic of the at least one dragged object to the teachings of Malamud and Muller. One would have been motivated to add while the at least one object is being dragged, the first variable graphic in the user interface as an alphanumeric representation process including a numerical value representing a characteristic of the at least one dragged object to the teachings of Malamud and Muller in order to reduce ambiguity as to the parameters and operation that is currently being executed (Muller: column 2, lines 1-18).

Claim 25. (Canceled)

Claim 26. Malamud and Muller disclose the computer-readable recording medium of claim 23, and Malamud further discloses the computer program causes the computer to perform further operations comprising:

- a. determining when the second image of the cursor is positioned in the user interface over a destination object to which the at least one dragged object is to be copied (paragraphs 0047, 0088, figure 2c); and

- b. controlling the display device to switch the display of the second image of the cursor to a display of a third image of the cursor in the user interface, upon determining that the second image of the cursor is positioned over the destination object to which the at least one dragged object is to be copied, wherein (paragraphs 0047, 0088, figure 2c, [the source object and the name of the target object are shown. If the object is a valid target object, information is output about the impending drag and drop operation.]),
- c. the second variable graphic of the third image of the cursor represents a copy operation (paragraphs 0047, 0088, figure 2c, ["copying source to target"], paragraphs 0047, 0088, figure 2c).

Claim 27. Malamud and Muller disclose the computer-readable recording medium of claim 26, and Malamud further discloses that information pointer settings include color (paragraph 0110). Therefore, considering the teachings of Malamud and Muller, it would have been obvious to one having ordinary skill in the art at the time of the invention to add first variable graphic of the second image of the cursor has a first color, and the second variable graphic of the third image of the cursor has a second color different from the first color to the teachings of Malamud and Muller. One would have been motivated to add first variable graphic of the second image of the cursor has a first color, and the second variable graphic of the third image of the cursor has a second color different from the first color to the teachings of Malamud and Muller in order to reduce ambiguity as to the parameters and operation that is currently being executed

(Muller: column 2, lines 1-18).

Claim 28. Malamud and Muller disclose the computer-readable recording medium of claim 26, and Malamud further discloses the numerical value represented in the first variable graphic of the second image of the cursor represents a one of a number of objects contained in the at least one dragged object and a cumulative data size of the at least one dragged object (paragraph 0059, figure 2L2, [the information box 41E in FIG. 2K2 includes the type of data in the document, the size of the document and the source of the document. The information shown in the information box 41 G in FIG. 2L2 includes the type of object (i.e., folder), the contents of the folder and the space occupied by the contents of the folder.]).

Claim 29. Malamud and Muller disclose the computer-readable recording medium of claim 28, and Malamud further discloses the second variable graphic of the third image of the cursor includes the numerical value (paragraph 0059, figure 2L2, [the information box 41E in FIG. 2K2 includes the type of data in the document, the size of the document and the source of the document. The information shown in the information box 41 G in FIG. 2L2 includes the type of object (i.e., folder), the contents of the folder and the space occupied by the contents of the folder.]).

Claim 30. Malamud and Muller disclose the computer-readable recording medium of claim 29, and Malamud further discloses the numerical value represented in the second

first variable graphic of the third image of the cursor object represents one of a number of objects being copied, and a cumulative data size of the number of objects being copied (paragraph 0059, figure 2L2, [the information box 41E in FIG. 2K2 includes the type of data in the document, the size of the document and the source of the document. The information shown in the information box 41 G in FIG. 2L2 includes the type of object (i.e., folder), the contents of the folder and the space occupied by the contents of the folder.])).

Claim 31. Malamud and Muller disclose the computer-readable recording medium of claim 23, and Malamud further discloses the numerical value indicates a number of objects contained in the at least one dragged object (paragraph 0059, figure 2L2, [the information box 41E in FIG. 2K2 includes the type of data in the document, the size of the document and the source of the document. The information shown in the information box 41 G in FIG. 2L2 includes the type of object (i.e., folder), the contents of the folder and the space occupied by the contents of the folder.])).

Claim 32. Malamud and Muller disclose the computer-readable recording medium of claim 23, and Malamud further discloses the numerical value indicates the cumulative size of the at least one dragged object (paragraph 0059, figure 2L2, [the information box 41E in FIG. 2K2 includes the type of data in the document, the size of the document and the source of the document. The information shown in the information box 41 G in FIG. 2L2 includes the type of object (i.e., folder), the contents of the folder and the

space occupied by the contents of the folder.)).

Claim 33. Malamud and Muller disclose the computer-readable recording medium of claim 23, and Malamud further discloses the first variable graphic of the second image of the cursor comprises a geometric object (paragraph 0042), and the size of the geometric object is dynamically varied to accommodate the numerical value (paragraph 0107, [the information box 41E in FIG. 2K2 includes the type of data in the document, the size of the document and the source of the document. The information shown in the information box 41 G in FIG. 2L2 includes the type of object (i.e., folder), the contents of the folder and the space occupied by the contents of the folder.])).

Claim 34. Malamud and Muller disclose the computer-readable recording medium of claim 23, but do not disclose the first variable graphic of the second image of the cursor indicates that the at least one dragged object will be deleted, as disclosed in the claims. However, Malamud discloses that the information cursor may provide information about the user's interaction with the object, for example, "deleting source file" (abstract). Therefore, considering the teachings of Malamud and Muller, it would have been obvious to one having ordinary skill in the art at the time of the invention to add the first variable graphic of the second image of the cursor indicates that the at least one dragged object will be deleted to the teachings of Malamud and Muller. One would have been motivated to add the first variable graphic of the second image of the cursor indicates that the at least one dragged object will be deleted to the teachings of

Malamud and Muller in order to alert the user to an impending delete operation so the user can avoid an unintended delete operation.

Claims 35, 38, 39, 40, 41, 42, 43, 44, 45, 46 disclose method for displaying a user interface and at least two different images of a cursor within the displayed user interface on a display device of a computer similar to the computer-readable recording medium having a computer program recorded thereon of claims 23, 26, 27, 28, 29, 30, 31, 32, 33, 34 and are rejected with the same rational.

37. (Canceled)

Claims 47, 50, 51, 52, 54, 55, 56, 57 disclose a method for displaying a user interface and at least two different images of a cursor within the displayed user interface on a display device of a computer similar to the to the computer-readable recording medium having a computer program recorded thereon, with the exception that the first cursor image comprises a pointer and a tail, of claims 23, 26, 27, 28, 30, ,31, 32, 33, 34 and are rejected with the same rational.

49. (Canceled)

53. (Cancelled)

Claims 59, 61, 62, 63, 66, 67, 68, 69 disclose a computer processing device similar to the computer-readable recording medium having a computer program recorded thereon of claims 23, 26, 27, 28, 31, 32, 33, 34 and are rejected with the same rationale

64. (Cancelled)

65. (Cancelled)

Claim 70. Malamud and Muller disclose the computer-readable recording medium of claim 23, and Malamud further discloses the computer program causes the computer to control the display device to display the graphical representation of the second variable graphic of the third image of the cursor as one of a first symbol indicating that the operation associated with the dragging of the at least one dragged object can be successfully performed based on the characteristic of the at least one dragged object, and a second symbol indicating that the operation associated with the dragging of the at least one object cannot be successfully performed based on the characteristic of the at least one dragged object (paragraph 0011 [The format may be: (i) the name of the object over which the cursor is positioned on the video display; (ii) information about the object; (iii) a graphical representation of the object, known as a preview; or (iv) any combination of the previously mentioned formats.], paragraph 0088 [Returning to FIG. 4B, if there are not multiple objects selected

(no response in step 76), a test is made to determine if the user is in the process of performing a drag and drop operation (step 82). ... If the object is a valid target object, information is output about the impending drag and drop operation (step 88), for example, "Copying source to target." ... If the target is not valid, processing for an invalid target object is performed (step 92). It will be appreciated that there are a myriad of ways to process an invalid target object. In one actual embodiment of the present invention, no information is displayed in the information box but the cursor changes, for example, to a circle with a slash through the circle. In another embodiment, an error message is displayed in the information box.)).

Claim 71. Malamud and Muller disclose the computer-readable recording medium of claim 30, and Malamud further discloses the computer program causes the computer to control the display device to display the graphical representation of the second variable graphic of the third image of the cursor as one of a first symbol indicating that the copy operation can be successfully performed based on the numerical value represented in the second variable graphic of the third image of the cursor, and a second symbol indicating that the copy operation cannot be successfully performed based on the numerical value represented in the second variable graphic of the third image of the cursor (paragraph 0088 [If the object is a valid target object,

information is output about the impending drag and drop operation (step 88), for example, "Copying source to target.")).

Claim 72. Malamud and Muller disclose the computer-readable recording medium of claim 23, but do not specifically disclose the computer program causes the computer to control the display device to display the graphical representation of the second variable graphic of the third image of the cursor by one of (i) modifying a color of the first variable graphic of the second image of the cursor to a first color indicating that the operation associated with the dragging of the at least one dragged object can be successfully performed based on the characteristic of the at least one dragged object, and (ii) modifying the color of the first variable graphic of the second image of the cursor to a second color indicating that the operation associated with the dragging of the at least one object cannot be successfully performed based on the characteristic of the at least one dragged object, as disclosed in the claims. However, Malamud discloses "Examples of information pointer settings include color and font." (paragraph 0110). Therefore, considering the teachings of Malamud and Muller, it would have been obvious to one having ordinary skill in the art at the time of the invention to add the computer program causes the computer to control the display device to display the graphical representation of the second variable graphic of the third image of the cursor by one of (i) modifying a color of the first variable graphic of the second image of the cursor to a first color indicating that the operation associated with the dragging of the at least one dragged object can be successfully performed based on

the characteristic of the at least one dragged object, and (ii) modifying the color of the first variable graphic of the second image of the cursor to a second color indicating that the operation associated with the dragging of the at least one object cannot be successfully performed based on the characteristic of the at least one dragged object to the teachings of Malamud and Muller. One would have been motivated to add the computer program causes the computer to control the display device to display the graphical representation of the second variable graphic of the third image of the cursor by one of (i) modifying a color of the first variable graphic of the second image of the cursor to a first color indicating that the operation associated with the dragging of the at least one dragged object can be successfully performed based on the characteristic of the at least one dragged object, and (ii) modifying the color of the first variable graphic of the second image of the cursor to a second color indicating that the operation associated with the dragging of the at least one object cannot be successfully performed based on the characteristic of the at least one dragged object to the teachings of Malamud and Muller because the Supreme Court in *KSR International Co. v. Teleflex Inc.* identified applying a known technique to a known device (method, or product) ready for improvement to yield predictable results as a rational to support a conclusion of obviousness which is consistent with the proper "functional approach" to the determination of obviousness as laid down in *Graham*.

Claim 73. Malamud and Muller disclose the computer-readable recording medium of claim 30, but do not specifically disclose the computer program causes the computer to

control the display device to display the graphical representation of the second variable graphic of the third image of the cursor by one of (i) modifying a color of the first variable graphic of the second image of the cursor to a first color indicating that the copy operation can be successfully performed based on the numerical value represented in the second variable graphic of the third image of the cursor, and (ii) modifying the color of the first variable graphic of the second image of the cursor to a second color indicating that the copy operation cannot be successfully performed based on the numerical value represented in the second variable graphic of the third image of the cursor, as disclosed in the claims. However, Malamud discloses "Examples of information pointer settings include color and font." (paragraph 0110). Therefore, considering the teachings of Malamud and Muller, it would have been obvious to one having ordinary skill in the art at the time of the invention to add the computer program causes the computer to control the display device to display the graphical representation of the second variable graphic of the third image of the cursor by one of (i) modifying a color of the first variable graphic of the second image of the cursor to a first color indicating that the copy operation can be successfully performed based on the numerical value represented in the second variable graphic of the third image of the cursor, and (ii) modifying the color of the first variable graphic of the second image of the cursor to a second color indicating that the copy operation cannot be successfully performed based on the numerical value represented in the second variable graphic of the third image of the cursor to the teachings of Malamud and Muller. One would have been motivated to add the computer program causes the computer to

control the display device to display the graphical representation of the second variable graphic of the third image of the cursor by one of (i) modifying a color of the first variable graphic of the second image of the cursor to a first color indicating that the copy operation can be successfully performed based on the numerical value represented in the second variable graphic of the third image of the cursor, and (ii) modifying the color of the first variable graphic of the second image of the cursor to a second color indicating that the copy operation cannot be successfully performed based on the numerical value represented in the second variable graphic of the third image of the cursor to the teachings of Malamud and Muller because the Supreme Court in KSR International Co. v. Teleflex Inc. identified applying a known technique to a known device (method, or product) ready for improvement to yield predictable results as a rational to support a conclusion of obviousness which is consistent with the proper "functional approach" to the determination of obviousness as laid down in Graham.

Claims 74-77 disclose a method similar to the computer readable recording medium of claims 70-73 and are rejected with the same rational.

Claims 78-81 disclose a method similar to the computer readable recording medium of claims 70-73 and are rejected with the same rational.

Claims 82-85 disclose a computer processing device similar to the computer readable recording medium of claims 70-73 and are rejected with the same rational.

4. Claims 24, 36, 48, 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malamud et al. (US 20030142123 A1) in view of Muller (US 4,984,152) and further in view of Lection et al. (US 5801698).

Claim 24. Malamud and Muller disclose the computer-readable recording medium of claim 23, wherein the computer program causes the computer to perform further operations comprising:

- a. controlling the display device to switch the display of the first image of the cursor to a display of a fourth image of the cursor in the user interface, the fourth image of the cursor comprising a third hybrid cursor having a pointer arrow and a third variable graphic replacing the tail comprised in the first image of the cursor (paragraphs 0042, 0047, figure 2c, paragraph 0052, figure 2E).

Malamud and Muller do not disclose,

- a. determining when the first image of the cursor is positioned in the user interface over an object that is associated with an application in a busy state;
- b. controlling the display device to switch the display of the first image of the cursor to a display of a third image of the cursor in the user interface, upon determining that the first image of the cursor is positioned over the user interface object associated with the application in the busy state, the third image of the cursor

- comprising a second hybrid cursor having a pointer arrow and a second variable graphic replacing the tail comprised in the first image of the cursor; and
- c. controlling the display device to, while the cursor is positioned over the user interface object associated with the application in the busy state, display the third variable graphic of the fourth image of the cursor as a representation of the busy state of the application in the busy state,

as disclosed in the claims. However, in the same field of invention, Lektion discloses displaying a busy cursor over an application that is processing or busy (column 4, lines 38-44, figure 2). Therefore, considering the teachings of Malamud, Muller and Lektion, it would have been obvious to one having ordinary skill in the art at the time of the invention to add

- d. determining when the first image of the cursor is positioned in the user interface over an object that is associated with an application in a busy state;
- e. controlling the display device to switch the display of the first image of the cursor to a display of a third image of the cursor in the user interface, upon determining that the first image of the cursor is positioned over the user interface object associated with the application in the busy state, the third image of the cursor comprising a second hybrid cursor having a pointer arrow and a second variable graphic replacing the tail comprised in the first image of the cursor; and
- f. controlling the display device to, while the cursor is positioned over the user interface object associated with the application in the busy state, display the

second variable graphic of the third image of the cursor as a representation of the busy state of the application in the busy state,

to the teachings of Malamud and Muller. One would have been motivated to add

- g. determining when the first image of the cursor is positioned in the user interface over an object that is associated with an application in a busy state;
- h. controlling the display device to switch the display of the first image of the cursor to a display of a third image of the cursor in the user interface, upon determining that the first image of the cursor is positioned over the user interface object associated with the application in the busy state, the third image of the cursor comprising a second hybrid cursor having a pointer arrow and a second variable graphic replacing the tail comprised in the first image of the cursor; and
- i. controlling the display device to, while the cursor is positioned over the user interface object associated with the application in the busy state, display the second variable graphic of the third image of the cursor as a representation of the busy state of the application in the busy state,

to the teachings of Malamud and Muller in indicate to a user if a drag and drop operation can be performed on a target application.

Claim 36 discloses method for displaying a user interface and at least two different images of a cursor within the displayed user interface on a display device of a computer

similar to the computer-readable recording medium having a computer program recorded thereon of claim 24 and is rejected with the same rational.

Claim 48 discloses a method for displaying a user interface and at least two different images of a cursor within the displayed user interface on a display device of a computer similar to the to the computer-readable recording medium having a computer program recorded thereon, with the exception that the first cursor image comprises a pointer and a tail, of claim 24 and is rejected with the same rational.

. Claim 60 discloses a computer processing device similar to the computer-readable recording medium having a computer program recorded thereon of claim 24 and is rejected with the same rational

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN HEFFINGTON whose telephone number is (571)270-1696. The examiner can normally be reached on 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boris M. Pesin can be reached on 571-272-4070. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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